



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,264	09/08/2003	Shinji Tsuchiya	Q77385	8607
23373	7590	03/30/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LAU, TUNG S	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/656,264

Applicant(s)

TSUCHIYA ET AL.

Examiner

Tung S. Lau

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 2 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

/DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- a. Claims 1, 6, 3, 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaillie Frederic (EP 1209035) in view of Inoue et al. (U.S. Patent 6,439,059)

Regarding claim 1:

Chaillie Frederic discloses a method of predicting a displacement range of a wire harness, comprising the steps of: designing a basic route of the wire harness (Col. 1-2, Lines 40-35), fixing the wire harness at least two different fixing points on the basic route (Col. 1-2, Lines 40-35, fig. 1), computing a displacement range of the wire harness between the fixing points (Col. 1-2, Lines 40-35), based on a length of the basic route between the fixing points including a dimensional tolerance (Col. 1-2, Lines 40-35), fixing positions and fixing directions of the wire harness at the fixing points, ,and displaying the displacement range of the wire harness in three dimensions (Col. 1-2, Lines 40-35).

Regarding claim 6:

Chaillie Frederic discloses a predicting program for executing a method of predicting a displacement range of a comprising the steps of wire harness used

in a computer, said program designing a basic route of the wire harness which is fixed at least two different fixing points on the basic route (Col. 1-2, Lines 40-35, Col. 3-4, Lines 56-18, fig. 1); computing a displacement range of the wire harness between the fixing points (Col. 1-2, Lines 40-35, Col. 3-4, Lines 56-18), based on a length of the basic route between the fixing points including a dimensional tolerance (Col. 1-2, Lines 40-35, Col. 3-4, Lines 56-18), fixing positions and fixing directions of the wire harness at the fixing points, and displaying the displacement range of the wire harness in three dimensions (Col. 1-2, Lines 40-35, Col. 3-4, Lines 56-18).

Regarding claims 3 and 8, Chaillie Frederic also discloses combining the computed displacement range with at least one of a shape of a fixing portion and an interposition object (Col. 1-2, Lines 40-35), and displaying the combined image in three dimensions (Col. 1-2, Lines 40-35, fig. 5); Regarding claim 4, Chaillie Frederic also discloses wire is arranged on a body of a vehicle (Col. 1, Lines 5-39);

Chaillie Frederic does not disclose a minimum bending radius of the wire harness and a value of a length of the wire between fixing point. Inoue discloses a value of a length of the wire between fixing point (Col. 5-6, Lines 54-30), in order to have the proper prediction of the life of the wire (Col. 1, Lines 50-59); Ordinary skill in the art at the time the invention was made known when the wire is

bending more than the manufacture recommended minimum bending radius, the wire inner conductor will break and permanently damage, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chaillie Frederic to have the minimum bending radius of the wire harness in order not to damage the wire when the wire is bending or moving and to have the proper prediction of the life of the wire.

b. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chaillie Frederic (EP 1209035).

Regarding claim 5:

Chaillie Frederic discloses a predicting device for predicting a displacement range of a pre-designed basic route of a wire harness, comprising: an input unit, inputting a length of the basic route including a dimensional tolerance (Col. 1-2, Lines 40-35), fixing positions and fixing directions of the wire harness on at least two different fixing points where the wire harness is fixed by fixing members (Col. 1-2, Lines 40-35, fig. 1), a displacement range computing unit, computing the displacement range of the wire harness between the fixing members, based on the length of the basic route, the fixing positions, the fixing directions, and a display unit, displaying the displacement range in three dimensions (Col. 1-2, Lines 40-35, Col. 3-4, Lines 56-18).

Chaillie Frederic does not disclose a minimum bending radius of the wire harness. Ordinary skill in the art at the time the invention was made know when

Art Unit: 2863

the wire is bending more than the manufacture recommended minimum bending radius, the wire inner conductor will break and permanently damage, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chaillie Frederic to have the minimum bending radius of the wire harness in order not to damage the wire when the wire is bending or moving.

Claim Objections

2. Claims 2, and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach successively connecting the outermost points, which are close to each other.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

3. Applicant's arguments with respect to claims 1, 5, 6, 3, 4 and 8 have been considered but are moot in view of the new ground(s) of rejection. However,

Art Unit: 2863

applicant's arguments filed 3/15/2005 have been fully considered but they are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

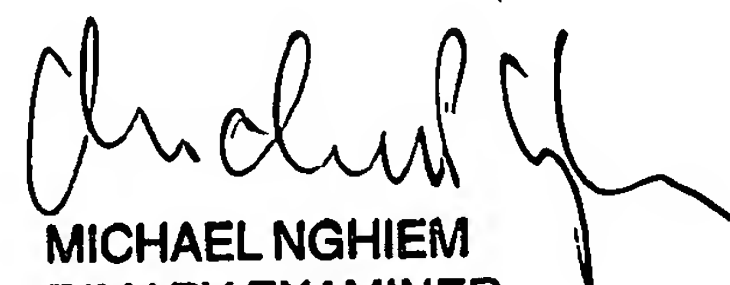
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL


MICHAEL NGHIEM
PRIMARY EXAMINER